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OM nucleic - nucleic search, using sw model

Run on: September 9, 2004, 14:29:30 ; Search time 48 Seconds
(without alignments)
3.880 Million cell updates/sec

Title: I12861
Perfect score: 9589
Sequence: 1 ACCCGCCCATATAGGGGCG.....TTTTTTTTTTTTTTTTTTT 9589

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 0.0

Searched: 1 seqs, 9711 residues

Total number of hits satisfying chosen parameters: 2

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1 summaries

Database : Pending Patents NA Main:US-09-980-559-1

- 1: /cgn2_6/ptodata/2/pna/US006 COMB.seq:US-09-980-559-1
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Result Query
No. Score Match Length DB ID Description

1 8970.38 93.5 9711 42 US-09-980-559-1 Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-980-559-1
; Sequence 1, Application US/09980559
; GENERAL INFORMATION:
; APPLICANT: Yanagi, Masayuki
; APPLICANT: Emerson, Suzanne
; APPLICANT: Bukh, Jens
; APPLICANT: Purcell, Robert
; TITLE OF INVENTION: Cloned Genome of Infectious Hepatitis C Viruses of
; FILE REFERENCE: 20264302PC
; CURRENT APPLICATION NUMBER: US/09/980,559
; CURRENT FILING DATE: 2000-06-02
; PRIOR APPLICATION NUMBER: 60/137,693
; PRIOR FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 9711
; TYPE: DNA
; ORGANISM: Hepatitis C virus
US-09-980-559-1

Query Match 93.5%; Score 8970.38; DB 42; Length 9711;
Best Local Similarity 96.0%; Pred. No. 0;
Matches 9202; Conservative 0; Mismatches 386; Indels 0; Gaps 0;

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 Db 2821 GGTACTGATCACTCTCTTTTACACTCACCCCGGATATAAGACCCCTTCTCAGCCGTTTCT 2880
 QY |||||
 Db 2821 GGTAAATGATCACTCTCTTTTACTCTCACCCCGGATATAAGACCCCTTCTCAGCCGTTTCT 2880
 QY |||||
 Db 2881 GTGTGTGTGTGCTATCTTCTGAACCTCGCGAAGCTATGCTCAGGAGTGGGACCCACC 2940
 QY |||||
 Db 2881 GTGTGTGTGTGCTATCTTCTGACCCCTGGGGAAGCTATGCTCAGGAGTGGGACCCACC 2940
 QY |||||
 Db 2941 TATGAGGTGCGCGTGGCGGTGATGGGATCATATGCGCGCTCGCATATCTTGCOCGGG 3000
 QY |||||
 Db 2941 TATGAGGTGCGCGTGGCGGTGATGGGATCATATGCGCGCTCGCATATCTTGCOCGGG 3000
 QY |||||
 Db 3001 TGTGTGTGTGACATAAACCAAGTGGCTCTTGGCGGTGCTTGGGCTTGTCTTACTCTCTAAA 3060
 QY |||||
 Db 3001 TGTGTGTGTGACATAAACCAAGTGGCTCTTGGCGGTGCTTGGGCTTGTCTTACTCTCTAAA 3060
 QY |||||
 Db 3061 AGGTGCTTTGACGCGTGTGCCGTAATTTGCTCAGGGCTCAGCTCTACTTAAGATGTGCAC 3120
 QY |||||
 Db 3061 AGGTGCTTTGACGCGTGTGCCGTAATTTGCTCAGGGCTCAGCTCTACTTAAGATGTGCAC 3120
 QY |||||
 Db 3121 CATGTTAAGGATCTCGCGGGGTAGGTACGTCCAGATGTGTCTACTAGCCCTTGGCAG 3180
 QY |||||
 Db 3121 CATGTTAAGGATCTCGCGGGGTAGGTACGTCCAGATGTGTCTACTAGCCCTTGGCAG 3180
 QY |||||
 Db 3181 GTGGACTGCACTTACATCTATGACCACTCACCCCTATGTCCGATTTGGGTGCTTAATGG 3240
 QY |||||
 Db 3181 GTGGACTGCACTTACATCTATGACCACTCACCCCTATGTCCGATTTGGGTGCTTAATGG 3240
 QY |||||
 Db 3241 CCTGCGGACCTTGGCGGTGCGGCTGAGGCTATCTTTCAGTCCGATCGAGAAAGT 3300
 QY |||||
 Db 3241 CCTGCGGACCTTGGCGGTGCGGCTGAGGCTATCTTTCAGTCCGATCGAGAAAGT 3300
 QY |||||
 Db 3301 CATGCTCTGGGAGCGGAGACAGCTGCTTGGCGGATATCTTACAGGACTTCCCGTGTG 3360
 QY |||||
 Db 3301 CATGCTCTGGGAGCGGAGACAGCTGCTTGGCGGATATCTTACAGGACTTCCCGTGTG 3360
 QY |||||
 Db 3361 CGCCGACCTTGGCGGAGGCTCTCTTGGCCAGCTGATGGCTATACCTTCCAAAGGGGTG 3420
 QY |||||
 Db 3361 CGCCGACCTTGGCTGGGAGGCTCTCTTGGCCAGCTGATGGCTATACCTTCCAAAGGGGTG 3420
 QY |||||
 Db 3421 GAGTCTTCTGCCCCCATCTCTGCTTATGCCCCAGACACGCGGCTTTTGGGACCAT 3480
 QY |||||
 Db 3421 GAGTCTTCTGCCCCCATCTCTGCTTATGCCCCAGACACGCGGCTTTTGGGACCAT 3480
 QY |||||
 Db 3481 AGTGTGAGCATACGCGGCGGACAGCAAGACAGAGCAAGGCGGGAGATTCAGGTCCTGTG 3540
 QY |||||
 Db 3481 AGTGTGAGCATACGCGGCGGACAGCAAGACAGAGCAAGGCTGGGAAATTCAGGTCCTGTG 3540
 QY |||||
 Db 3541 CAGGCTCACTCAGTCTTCTTCTCGGAAACATCCATCTCGGGGTCTTATGAGTGTCTACCA 3600
 QY |||||
 Db 3541 CAGGCTCACTCAGTCTTCTTCTCGGAAACATCCATCTCGGGGTCTTATGAGTGTCTACCA 3600
 QY |||||
 Db 3601 TGGAGCTGGCAACAGACTCTAGCCGCTCAGCGGCTCCGCTCAGAGATGTACTCCAG 3660
 QY |||||
 Db 3601 TGGAGCTGGCAACAGACTCTAGCCGCTCAGCGGCTCCGCTCAGAGATGTACTCCAG 3660
 QY |||||
 Db 3661 TGCTGAGGGGACCTTACTGAGGTTGGCCAGCCCCCGGACCAAAATCTTTTGGAGCCGTG 3720
 QY |||||
 Db 3661 TGCTGAGGGGACCTTACTGAGGTTGGCCAGCCCCCGGACCTTAAATCTTTTGGAGCCGTG 3720
 QY |||||
 Db 3721 CACGTGTGGAGCGGTCCGACCTTATACCTGTTACCTGTTACGCGGAACTGATGTCTCCGGTCTG 3780
 QY |||||
 Db 3721 CACGTGTGGAGCGGTCCGACCTTATACCTGTTACCTGTTACGCGGAACTGATGTCTCCGGTCTG 3780
 QY |||||
 Db 3781 AAGACGCGGGGACAAAGCGAGGAGCGCTACTCTCCCGAGACCTCTTCCACTTGAAGGG 3840
 QY |||||
 Db 3781 AAGACGCGGGGACAAAGCGGAGGAGCGCTACTCTCCCGAGACCTCTTCCACTTGAAGGG 3840
 QY |||||

QY	3841	GTCCCTCGGGGCGCGGTGCTCTGCGCCAGGAGCCACGCTGTGCGGGTCTTCCCGGGACG	3900
Db	3841	GTCCCTCAGAGCGCGCGGTGCTATGTCGCCAGGGGCCACGCTGTGCGAGTCTTCCGGGACG	3900
QY	3901	CGTGTCTCCGGGGCGTGGCCAACTCCATAGATTTATCCCGCTTGAGACACTTGACAT	3960
Db	3901	TGTGTCTCTCGGGCGTGGCTAAGTCCATAGATTTATCCCGCTTGAGACACTCGACAT	3960
QY	3961	CGTCACTCGGTCCCCCACTTTTAGTGAACAAGACACCACTGCTGTGCCCCAAACTTA	4020
Db	3961	CGTCACGGGTCCCCCACTTTTAGTGAACAAGACACCACTGCTGTGCCCCAGACCTA	4020
QY	4021	TCAGTTCGGGTACTTACATGCCCGACCTGAGTGTGGAAGAGACCAAGTCCCTGTGCG	4080
Db	4021	TCAGTTCGGGTACTTGCATGCCCGACCTGAGTGTGGAAGAGACCAAGTTCCTGTGCG	4080
QY	4081	GTATGCCGCTCAGGGGTACAAAGTGTAGTGTCTTAATCCCTCGGTGGTGCACCCCTGGG	4140
Db	4081	ATATGCTGCTCAGGGGTATAAAGTGTAGTGTCTTAATCCCTCAGTGGTGCACCCCTGGG	4140
QY	4141	GTTTGGGCGTACTTGTCCAGGACATGGGATCAATCCCAACTTAGGACTGGGGTCAAG	4200
Db	4141	GTTTGGGCGTACTTGTCTAAGGACATGGGATCAATCCCAACTTAGGACTGGAGTCAAG	4200
QY	4201	GACTGTGACGACCGGGGCGCCATCAGTACTCCACATATGSCAAATTCCTCGCCGATGG	4260
Db	4201	GACTGTGACGACCGGGGCGCCATCAGTACTCCACATATGSCAAATTCCTCGCCGATGG	4260
QY	4261	GGGTGCGGACCGGCGGCGCTATGATCATCATATGCGATGAATGCCATGCCGTGGACTC	4320
Db	4261	GGGTGCTGGGGCGGCGCTACGACATCATCATATGATGAATGCCATGCCGTGGACTC	4320
QY	4321	TACCACCATTTCTCGGATCGGAAAGTCTCTGATCAGCAGAGACAGCCGGGGTCAAGCT	4380
Db	4321	TACCACCATCTTGGCATCGGAACAGTCTTGTATCAAGCAGAGACAGTGGGGTCAAGCT	4380
QY	4381	AACCTGTACTGCTACGGCTACGCCCCCGGTGAGTGACACACCCCGACCCCAACATAGA	4440
Db	4381	AACCTGTCTGGCTACAGTACGCCCCCTGGGTGAGTGACACACCCCGACCCCAACATAGA	4440
QY	4441	GGAGTGGCCCTTCGGGAGAGGGTGAATCCCTTCTATGGGAGGGCGATTCCTCCCTGTC	4500
Db	4441	GGAGTGGCCCTTCGGGAGAGGGCGAGATCCCTTCTATGGGAGGGCGATTCCTCCCTGTC	4500
QY	4501	ATACATCAAGGGAGGAGACATTTGATCTTCTGCACTCAAGAAAGTGTGACGAGCT	4560
Db	4501	TTTACATCAAGGGAGGAGACATCTGATCTTCTGCCATTCAAAGAAAGTGTGACGAGCT	4560
QY	4561	CGCGGCGGCCCTTCGGGGTATGGGCTTTGAACGCAAGTGGCATACTACAGAGGGCTGGACGT	4620
Db	4561	CGCGGCGGCCCTTCGGGGTATGGGCTTTGAACCTAGTGGCATACTACAGAGGGTGGACGT	4620
QY	4621	CTCGTAATACCAACTCAGGGAGAGCTGAGTGGTGGCCACCGACGCCCTCATGACGGG	4680
Db	4621	CTCGTAATACCAACTCAGGGAGAGCTGAGTGGTGGCCACCGACGCCCTCATGACAGG	4680
QY	4681	GTTTACTGAGACTTTTGACTCCGTTGATCGACTGCAAGCTAGCGGTCACTCAAGTTGAGA	4740
Db	4681	GTATATCTGGGACTTTTGACTCCGTTGATCGACTGCAAGTAGCGGTCACTCAAGTTGAGA	4740
QY	4741	CTTTCAGTTGGACCCCACTTACCAATACCAACACACAGACTGTCCCTCAAGACGCTGTCTC	4800
Db	4741	CTTTCAGTTTAGACCCCACTTACCAATACCAACACACAGACTGTCCCTCAAGACGCTGTCTC	4800
QY	4801	ACGTAGCCAGCGCGGGCGGACGGGAGGAGACTGGGTATTTATAGGTATGTTTC	4860
Db	4801	ACGTAGCCAGCGCGGGGTGCGACGGGTAGGGAGACTGGGCAATTTATAGGTATGTTTC	4860
QY	4861	CACGTGTGAGCGACCTTCAGGAATGTTTGACAGTGTAGTCTCTGCGAGGTGCTACGATGC	4920
Db	4861	CACGTGTGAGCGACCTTCAGGAATGTTTGACAGTGTAGTCTCTGCGAGGTGCTACGACGC	4920

QY	4921	AGGGGCGGCTATGGCTTATGAGCTCACACAGCGGAGACACCGTCAAGGCTCAGAGCATATTT	4980
Db	4921	AGGGGCGGCTATGGCTTATGAGCTCACACCATCGGAGACCAACCGTCAAGGCTCAGGGCTATTT	4980
QY	4981	CAACACACTCTGTTTGCCTGTGTGCAAGACCATCTTGAGTTTGGGAGGAGTTCAC	5040
Db	4981	CAACACGCGCGTGTGCTGTGTGCAAGACCATCTTGAGTTTGGGAGGAGTTCAC	5040
QY	5041	CGGCTCACACATAGATGCCACTTCTTTCCAAACAAAGCAATCGGGGGAAAAATTT	5100
Db	5041	CGGCTCACACATAGATGCCACTTCTTTCCAAACAAAGCAATCGGGGGAAAAATTT	5100
QY	5101	CGATACTTAACAGCTTACAGGCTACAGTGTGGCTTAGGGCCAAAGCCCCCCCCCGTC	5160
Db	5101	CGCATACTTAACAGCTTACAGGCTTACAGTGTGGCTTAGGGCCAAAGCCCCCCCCCGTC	5160
QY	5161	CTGGGAGCTCATGTGGAAAGTGTGACTCGACTCAAGCCCCACACTCGTGGGCCCCACACC	5220
Db	5161	CTGGGAGCTCATGTGGAAAGTGTGACTCGACTCAAGCCCCACACTCGTGGGCCCCACACC	5220
QY	5221	TCTCTGTACCGCTTTGGGCTCTGTTCACACGAGGTCAACCTCACGCATCTCTGTACGAA	5280
Db	5221	TCTCTGTGTACCGCTTTGGGCTCTGTTCACACGAGGTCAACCTCACGCATCTCTGTACGAA	5280
QY	5281	ATACATCGCCACCTGCAAGCGGCTTGAAGTCAATGACACGACGCTGGGTCTTAGC	5340
Db	5281	ATACATCGCCACCTGCAAGCGGCTTGAAGTCAATGACACGACGCTGGGTCTTAGC	5340
QY	5341	TGGGGGGTCTTTGGCGGCGCTGCGCGGTACTGCTCGCGACCGGGTGTGTTTCATCAT	5400
Db	5341	AGGGGGAGTCTTGGCGGCGCTGCGCGGTATTGCTCGCGACCGGGTGTGTTTCATCAT	5400
QY	5401	CGGCGCTTGCACGTTAAACAGCGAGCGCTGTTGACACCGGACAAAGAGGTCTCTATGA	5460
Db	5401	CGGCGCTTGCACATTAACAGCGAGCGCTGTTGACACCGGACAAAGAGGTCTCTATGA	5460
QY	5461	GGCTTTTGTAGTGAAGTGAAGTGTGCTCTAGAGCGGCTCTCATTTGAAGAGGGGCGAGC	5520
Db	5461	GGCTTTTGTAGTGAAGTGAAGTGTGCTCTAGAGCGGCTCTCATTTGAAGAGGGGCGAGC	5520
QY	5521	GATAGCGGAGATGCTGAAGTCCAAAGTCCAAAGGCTTATTCAGCAAGCTTCCAAACAGC	5580
Db	5521	GATAGCGGAGATGCTGAAGTCCAAAGTCCAAAGGCTTATTCAGCAAGCTTCCAAACAGC	5580
QY	5581	TCAGACATCAACCCCTGTGACAGGCTTCTTGGCCCAAGGTAGAGCAATCTGGGCGAA	5640
Db	5581	TCAGACATCAACCCCACTGTGACAGGCTTCTTGGCCCAAGGTAGAGCAATCTGGGCGAA	5640
QY	5641	ACATGTGGAATTTTCATCAGCGCATTCATATCTCGCAGGACTATCAACACTGCCAGG	5700
Db	5641	ACATGTGGAATTTTCATTAGCGGCATTCATATCTCGCAGGACTATCAACACTGCCAGG	5700
QY	5701	GAACCTGTGTAGTCTTCCATGATGGCAATTCAGTGGCGGCTCACCAGTCCGTGTCAAC	5760
Db	5701	GAACCTGTGAGTGTCTTCCATGATGGCAATTCAGTGGCGGCTCACCAGTCCGTGTCAAC	5760
QY	5761	TAGCACACTATCTTCTCAAGTGTGGGGCTGGCTAGCATCCCAATGGGCGCTCC	5820
Db	5761	AAGCACACTATCTTCTCAAGTGTGGGGCTGGCTAGCATCCCAATGGGCGCTCC	5820
QY	5821	CGCGGGGCTTACCGGCTTCTGCTCAGTGGCTTGGTGGGGCTGCGTAGGAGCATAGG	5880
Db	5821	CGCGGGGCTTACCGGCTTCTGCTCAGTGGCTTGGTGGGGCTGCGTAGGAGCATAGG	5880
QY	5881	CTTGGGTAGGTGCTCGTGTGAACATCTGCGAGGGTATGTTGGGGCAATTCGGGGGCTCT	5940
Db	5881	CTTAGGTAAAGTCTAGTGGACATCTGCGCAGGGTATGTTGGGGCAATTCGGGGGCTCT	5940
QY	5941	CGTCGATTTCAAGATCATGTCTGGCGAAGCCCTCCATGGAGGATGTTGTCAACCTGCT	6000
Db	5941	CGTCGATTTCAAGATCATGTCTGGCGAAGCCCTCCATGGAGGATGTTGTCAACCTGCT	6000
QY	6001	GCTGGAAATTTCTCTCCGGGTGCGGCTGTTGGAGTTCATCTGCGCGGCCCATCTCTGCG	6060

Db	6001	GCCTGGAAATTCCTGCTCCGGGTGCTTGGTGTAGTGGAGTCACTCGCGCGCCATTCCTGGC	Db	7081	GTCCAAAGTGTGCTTCTGGAGCTCTCTCGAACCAATGGTCTGAAGAAAGAGGAGCGACCTTGA	7140
QY	6061	CCGACACGTGGGACCGGGGGAAGCGCTGTCNAATGGATGAATAGACTCATTTGCCCTTTGC	QY	7141	GCCTTGTGATPACCATCGGAATATATGCTCCCAAGAAAGAGATTCCTCCACGACCTTACCGGC	7200
Db	6061	CCGACACGTGGGACCGGGGGAAGCGCGCTCCNAATGGATGAATAGACTCATTTGCCCTTTGC	Db	7141	GCCTTCGATACCATCAGAATACATGCTCCCAAGAAAGAGTTCCTCCACGACCTTACCGGC	7200
QY	6121	TTTCAGAGGAAACACAGTGCSCCCCCCACTACTACGTGAAGGAGTGGGATGCGTTCGAGCG	QY	7201	TTGGGACCGGCTGATTACAACCCACCGCTTGTGGAAATCGTGAAGAGGCGAGATTACCA	7260
Db	6121	TTTCAGAGGAAATCAAGTGCSCCCCCCACTACTACGTGAAGGAGTGGGATGCGTTCGAGCG	Db	7201	CTGGGCACCGGCTGATTACAACCCACCGCTTGTGGAAATCGTGAAGAGGCGAGATTACCA	7260
QY	6181	TGTGACCCAACTACTTGGTCCCTTACCATAAACAGCTGCTCAGAGACTCCACAACCTG	QY	7261	ACCGGCACTGTTTGGCGGCTGCTCTCCGCCCTTAAGTGAAGAAACCCCGACGCTCCGCC	7320
Db	6181	TGTGACCCAACTACTTGGTCCCTTACCATAAACAGCTGCTCAGAGACTCCACAACCTG	Db	7261	ACCGGCACTGTTTGGCGGCTGCTCTCCGCCCTTAAGTGAAGAAACCCCGACGCTCCGCC	7320
QY	6241	GATTACTGAGACTGCCCCCTCCATGTCAGCGGCTGCTGGCTCCGCGATGTGGGATTG	QY	7321	AAGGAGCGCGGACAGTGGGCTTAAGTGAAGACTCCATAGGAGATGCGCTTTCACAGCT	7380
Db	6241	GATTACTGAGACTGCCCCCTCCATGTCAGCGGCTGCTGGCTCCGCGATGTGGGATTG	Db	7321	AAGGAGCGCGGACAGTGGGCTTAAGTGAAGACTCCATAGGAGATGCGCTTTCACAGCT	7380
QY	6301	GGTTTGCACCATCTTAACAGACTTTAAAACTGGCTGACCTCCAAATTTGTTCCAAAGAT	QY	7381	GGCCATCAAGTCTTTGGCCAGCCCCCCCCCAAGCGGCGATTTCAGGCTTTTCCACGGGGC	7440
Db	6301	GGTTTGCACCATCTTAACAGACTTTAAAAATTTGGCTGACCTCCAAATTTATCCCAAGAT	Db	7381	GGCCATTAAGTCTTTGGCCAGCCCCCCCCCAAGCGGCGATTTCAGGCTTTTCCACGGGGC	7440
QY	6361	GCTGTGTCCTCCCTTATCTTGTGTAAGAGGGGTACAAGGGGTGTGGGCTGGCACTGG	QY	7441	GGACGACGCGGATTCGCGCAGTCGGACGCCCCCGCGATGTTGGCCCTTCGCGAGACAGG	7500
Db	6361	GCTGTGTCCTCCCTTATCTTGTGTAAGAGGGGTACAAGGGGTGTGGGCTGGCACTGG	Db	7441	GGCGCTGCGGATTCGCGCAGTCAGACGCTCTCTGATGAGTTGGCCCTTCGCGAGACAGG	7500
QY	6421	TATCATGACACACGGTGTCTTGGCGGCGCAATATCTCTGGCAATGTCCGCTCGGGCTC	QY	7501	TTCCATCTCTCATGCGCCCTCTCGAGGGGAGCTGGAGATCCAGACTTGGAGCTGGA	7560
Db	6421	CATCATGACACACGGTGTCTTGGCGGCGCAATATCTCTGGCAATGTCCGCTCGGGCTC	Db	7501	TTCCATCTCTCTCATGCGCCCTCTCGAGGGGAGCTGGAGATCCAGACTTGGAGCTGGA	7560
QY	6481	CATGAGAAATACGGGGCCCAAACTCATGAATPATCTGGCAGGGGACCTTTTCCATCAA	QY	7561	GCAGGTAGAGCTTCAACTCCCCCGGAGGGGGTGGTTAAACCCCGGCTTCAGGCTCGG	7620
Db	6481	CATGAGAAATACGGGGCCCTTAAGACTTCATGAATPATCTGGCAGGGGACCTTTTCCATCAA	Db	7561	GCAGGTAGAGCTTCAACTCCCCCGGAGGGGGTGGTTAAACCCCGGCTTCAGGCTCGG	7620
QY	6541	TTGTTACAGGAGGCGCAGTGGTGGCGAAACCGGACCAACTTTAAGATCGCACTG	QY	7621	GTCTTGTCTACTTGTCTCGAGGAGGACGACTCGTGTGTGTCTCCATGTCACTACTC	7680
Db	6541	TTGTTACAGGAGGCGCAGTGGTGGCGAAACCGGACCAACTTTAAGATCGCACTG	Db	7621	GTCTTGTCTACTTGTCTCGAGGAGGACGACTCGTGTGTGTCTCCATGTCACTACTC	7680
QY	6601	GAGGTCGCGCTCAGATGACGGAGGTGACGACGACGCGGTCAACCACTACATAAC	QY	7681	CTGACCGGGGCTCTAATACTCTTGTAGCCCCGAGAGGAAAGTTGCCAATTTGGCC	7740
Db	6601	GAGGTCGCGCTCAGATGACGGAGGTGACGACGACGCGGTCAACCACTACATAAC	Db	7681	CTGACCGGGGCTCTAATACTCTTGTAGCCCCGAGAGGAAAGTTGCCAATTTGGCC	7740
QY	6661	AGGACTTACCACTGAATCTTGAAGTTCCTTGGCAACTACTCTTCCAGAGTCTTTTC	QY	7741	CTTGAGCAACTCCCTGTTCGATATCAACAAGGTCTACTGTACCACTCAACAGAGGCG	7800
Db	6661	AGGACTTACCACTGAATCTTGAAGTTCCTTGGCAACTACTCTTCCAGAGTCTTTTC	Db	7741	CTTGAGCAACTCCCTGTTCGATATCAACAAGGTCTACTGTACCACTCAACAGAGGCG	7800
QY	6721	CTGGGTGACGAGTGCGATCCATAGTTTGGCCCCCATACGGAAGCGTTTTCGGGA	QY	7801	CTCAATTAAGGCTAAAAAGGTAACTTTTGTAGTGAAGTGAAGCGCTCGACGCTCATTTGA	7860
Db	6721	CTGGGTGACGAGTGCGATCCATAGTTTGGCCCCCATACGGAAGCGTTTTCGGGA	Db	7801	CTCAATTAAGGCTAAAAAGGTAACTTTTGTAGTGAAGTGAAGCGCTCGACGCTCATTTGA	7860
QY	6781	TGAGTCTGCTTCTGCTGGCTTAAATTCATTTGTCTGGGTCTCAGCTCCCTTGGGA	QY	7861	CTAGCTCTTGAGGACATTAAGCTAGCGGCTCCCAAGGTACCGCAAGGCTTCTCCTTT	7920
Db	6781	TGAGTCTGCTTCTGCTGGCTTAAATTCATTTGTCTGGGTCTCAGCTCCCTTGGGA	Db	7861	CTAGCTCTTAAAGGACATTAAGCTAGCGGCTCCCAAGGTACCGCAAGGCTTCTCCTTT	7920
QY	6841	TCCTGAACCTGACACAGACGTAATTGACGTCCATGTAAACAGACCCCATATCACGGC	QY	7921	AGAGGAGCTTGCAGTTAACTCCACCCCACTCTGTGCAAGATCCCAAGTATGGGTTTGGGCG	7980
Db	6841	CCCTGAACCCGACACAGACGTAATTGATCTCATGTAAACAGATCCATCTCATATCACGGC	Db	7921	AGAGGAGCTTGCAGTTAACTCCACCCCACTCTGTGCAAGATCCCAAGTATGGGTTTGGGCG	7980
QY	6901	GGAGCTGAGCGCGGCTTGGACAGGGGTCAACCCCGTCCGAGGCAAGCTCTCAGC	QY	7981	TAAGGAGTCCGCGAGTGTTCGGGAGAGCGCTTAAACACATCAAGTCCGTTGGGAAAGGA	8040
Db	6901	GGAGCTGAGCGCGGCTTGGACAGGGGTCAACCCCGTCCGAGGCAAGCTCTCAGC	Db	7981	TAAGGAGTCCGCGAGTGTTCGGGAGAGCGCTTAAACACATCAAGTCCGTTGGGAAAGGA	8040
QY	6961	GAGCAGCTATCGGCACCATCGCTGCGAGCCACCTGCAACCCACCGGCAAGGCTATGA	QY	8041	CCTCTTGAAGACACACAAACCAATTCCTACAACTATGCGCAAAATAGAGTGT	8100
Db	6961	GAGCAGCTATCGGCACCATCGCTGCGAGCCACCTGCAACCCACCGGCAAGGCTATGA	Db	8041	CCTCTTGAAGACACACAAACCAATTCCTACAACTATGCGCAAAATAGAGTGT	8100
QY	7021	TGTGACATGTTGGATGCCAACCTGTTTATGGGGGCGATGTGAACCGGATAGATCTGA	QY	8101	CTGGTGAACCCCAACCAAGGGGGGCAAGAGAGCTCGCTTATCGTTTACCTGACT	8160
Db	7021	TGTGACATGTTGGATGCCAACCTGTTTATGGGGGCGATGTGAACCGGATAGATCTGA	Db	8101	CTGGTGAACCCCAACCAAGGGGGGCAAGAGAGCTCGCTTATCGTTTACCTGACT	8160
QY	7081	GTCCAAAGTGTGCTTCTGAGCTCTCTCGACCAATGGTCTGAAGAAAGAGGAGCGACTTGA	QY	8161	CGGCTCAGGGTCTCGGAGAAATAGGCTTTATGATATACACAAAGCTTCCTCAGC	8220
Db	7081	GTCCAAAGTGTGCTTCTGAGCTCTCTCGACCAATGGTCTGAAGAAAGAGGAGCGACTTGA	Db	8161	CGGCTCAGGGTCTCGGAGAAATAGGCTTTATGACATTTACACAAAACTTCCTCAGC	8220

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QY 8221 GGTGATGGGGCTTCTTATGGATTCCAGTACTCCCCCGCTCAGCGGCTGAGAGTTTCTCTT 8280
Db 8221 GGTGATGGGGCTTCTTATGGATTCCAGTATTTCCCGCTCAGCGGCTAGAGTTTCTCTT 8280
QY 8281 GAAAGCATGGGCGGAAAGAACCCCTATGGGTTTTCGTATGATACCCGATGCTTTGA 8340
Db 8281 GAAAGCATGGGCGGAAAGAACCCCTATGGGTTTTCGTATGATACCCGATGCTTTGA 8340
QY 8341 CTCAACCGTCTACTGAGAGAGACATCAGGACTGAGGAGTCCATATATCGGGCTGTTCCTT 8400
Db 8341 CTCAACCGTCTACTGAGAGAGACATCAGGACTGAGGAGTCCATATATCGGGCTGTTCCTT 8400
QY 8401 GCCCGAGAGGCCACACTGCCATACACTCACTGACTGAGAGACTTTACGTGGGAGGCC 8460
Db 8401 GCCCGAGAGGCCACACTGCCATACACTCGTAACTGAGAGACTTTACGTGGGAGGCC 8460
QY 8461 CATGTTCAACAGCAAGGGCCAGACCTCGGGGTACAGGGGTTGCCCGCCAGCGGGTGCT 8520
Db 8461 TATGTTCAACAGCAAGGGCCAAACCTGCGGGTACAGGGGTTGCCCGCCAGCGGGTGCT 8520
QY 8521 TACCCTAGCATGGGGAACACCATCACATGCTATGTGAAAGCTTTAGCGGCTGTAAAGC 8580
Db 8521 CACCCTAGCATGGGGAACACCATCACATGCTATGCTGAAAGCTTTAGCGGCTGTAAAGC 8580
QY 8581 TGCAGGGATAATTGCGCCCAAACTGCTGCTATGCGCGCATGACTTGGTTGTCATCTCAGA 8640
Db 8581 TGCAGGGATAATTGCGCCCAAACTGCTGCTATGCGCGCATGACTTGGTTGTCATCTCAGA 8640
QY 8641 GAGCAGGGGACCGGAGGAGCGAGCGAACTGAGAGCTTTCACGAGGCTATGACCAG 8700
Db 8641 AAGCAGGGGACCGGAGGAGCGAGCGAACTGAGAGCTTTCACGAGGCTATGACCAG 8700
QY 8701 GTATTTCTGCCCCCTCTGCTGTGGCGTTCGGGCCCAAGCGCCGACAGATATGACCTGATC 8760
Db 8701 GTATTTCTGCCCCCTCTGCTGTGGCGTTCGGGCCCAAGCGCCGACAGATATGACCTGATC 8760
QY 8761 TTGCTCTCTCAAAATGCTGTGGCGTTCGGGCCCAAGCGCCGACAGATATGACCTGATC 8820
Db 8761 TTGCTCTCTCAAAATGCTGTGGCGTTCGGGCCCAAGCGCCGACAGATATGACCTGATC 8820
QY 8821 CAGAGACCTTACCTCAATCGCCCGGCTGCTGGGAAACAGTTAGACACTCCCTGT 8880
Db 8821 CAGAGACCTTACCTCAATCGCCCGGCTGCTGGGAAACAGTTAGACACTCCCTGT 8880
QY 8881 CAATTCATGGCTAGAAACATCCAGTACGCCCCAACCATATGGGCTGCGATGGTCT 8940
Db 8881 CAATTCATGGCTAGAAACATCCAGTACGCCCCAACCATATGGGCTGCGATGGTCT 8940
QY 8941 GATGACACACTTCTTCTCCATTCTCATGGCCCCAGATACTCTGGACCAAGAACCTCAACTT 9000
Db 8941 GATGACACACTTCTTCTCCATTCTCATGGCTCAGACACGCTGGACCAAGAACCTCAACTT 9000
QY 9001 TGAGATGTCAGGAGGGGTACTCGTGAGTCCCTTGGACCTCCAGCCATATATGAAAG 9060
Db 9001 TGAGATGTCAGGAGGGGTACTCGTGAGTCCCTTGGACCTCCAGCCATATATGAAAG 9060
QY 9061 GTTACAGGGCTTGACGCTTCTCTCTGCACACATACACTCCCGCACTGACACGGGT 9120
Db 9061 GTTACATGGGCTTGACGCTTCTCTCTGCACACATACACTCCCGCACTGACACGGGT 9120
QY 9121 GGCTTCAGCCCTCAGAAACCTTGGGGGCCACCCCTCAGAGCGTGGAAAGCGCGGCACG 9180
Db 9121 GGCTTCAGCCCTCAGAAACCTTGGGGGCCACCCCTCAGAGCGTGGAAAGCGCGGCACG 9180
QY 9181 TGCAGTCAGGCGTCCCTCATCTCCGTTGGGGGAGAGCGCGCTTTGCGGCCGATATCT 9240
Db 9181 TGCAGTCAGGCGTCCCTCATCTCCGTTGGGGGAGAGCGCGCTTTGCGGCCGATATCT 9240
QY 9241 CTTCAACTGGGCGGTGAAGACCAAGCTCAAACTCACTCCATTTGCCGGAAGCGCCTCCT 9300
Db 9241 CTTCAATTTGGGCGGTGAAGACCAAGCTCAAACTCACTCCATTTGCCGGAAGCGCCTCCT 9300
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QY 9301 GGATTTATCCAGCTGGTTTCACTGTCGGCGCGCGGGCGGACATTTATCACAGCGTCTC 9360
Db 9301 GGATTTATCCAGCTGGTTTCACTGTCGGCGCGCGGGCGGACATTTATCACAGCGTCTC 9360
QY 9361 GCGTGCCCGACCCCGCTTATTTACTCTTTGGCTACTCTACTTTTGTAGGGTAGGCT 9420
Db 9361 GCGTGCCCGACCCCGCTTATTTACTCTTTGGCTACTCTACTTTTGTAGGGTAGGCT 9420
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Search completed: September 9, 2004, 14:30:20
Job time : 50 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: September 9, 2004, 14:24:17 ; Search time 57 Seconds

(without alignments)

3.267 Million cell updates/sec

Title: IL2861

Perfect score: 9589

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Gapop 10.0 , Gapext 0.5

Searched: 1 seqs, 9711 residues

Total number of hits satisfying chosen parameters: 2

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Post-processing: Minimum Match 0%

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Listing first 1 summaries

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; APPLICANT: Emerson, Suzanne
; APPLICANT: Bukh, Jens
; APPLICANT: Purcell, Robert
; TITLE OF INVENTION: Cloned Genome of Infectious Hepatitis C Viruses of
; TITLE OF INVENTION: Genotype 2a and Uses Thereof
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; CURRENT FILING DATE: 2000-06-02
; PRIOR APPLICATION NUMBER: 60/137,693
; PRIOR FILING DATE: 1999-06-04
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QY 2821 GGTACTGATCACTCTCTTTTACACTCAACCCCGGGTATAAGACCTTCTCAGCGGTTTCT 2880
Db 2821 GGTAAATGATCACTCTCTTTTACTCTCAACCCCGGGTATAAGACCTTCTCAGCGGTTTCT 2880
QY 2881 GTGCTGTTTGTGCTATCTTCTGACCCCTGGCGGAGCTATGCTCCAGAGTGGGACCAACC 2940
Db 2881 GTGCTGTTTGTGCTATCTTCTGACCCCTGGCGGAGCTATGCTCCAGAGTGGGACCAACC 2940
QY 2941 TATGCAAGTGGCGGTGGCGGTGATGGGATCATATGSGGCCGTGCGCCATATTTACCCAGG 3000
Db 2941 TATGCAAGTGGCGGTGGCGGTGATGGGATCATATGSGGCCGTGCGCCATATTTACCCAGG 3000
QY 3001 TGTGGTCTTTGACATCAACCAAGTGGCTTCTTGGCGGTCTTTGGGCTCTTATCTCTTAAA 3060
Db 3001 TGTGGTCTTTGACATCAACCAAGTGGCTTCTTGGCGGTCTTTGGGCTCTTATCTCTTAAA 3060
QY 3061 AGTGTCTTTGACGCGTGTGCCGTACTTCTGTCAGGGCTCACGCTCTACTGAGGATGTCAC 3120
Db 3061 AGTGTCTTTGACGCGTGTGCCGTACTTCTGTCAGGGCTCACGCTCTACTGAGGATGTCAC 3120
QY 3121 CATGTTAAGCACTCTCGCGGGGTAGGTAGTCCAGATGGTGTCTATAGCCCTTGGCAG 3180
Db 3121 CATGTTAAGCACTCTCGCGGGGTAGGTAGTCCAGATGGTGTCTATAGCCCTTGGCAG 3180
QY 3181 GTGCACTGGCACTTACATCTATGACCACTCACCCCTATGTCGGATTTGGGCTGCTAATGG 3240
Db 3181 GTGCACTGGCACTTACATCTATGACCACTCACCCCTATGTCGGATTTGGGCTGCTAATGG 3240
QY 3241 CCTCGGGACTTGGCGGTGCGCGTGGAGCCTCATCTTCACTCGATGGAAGAAAAGT 3300
Db 3241 CCTCGGGACTTGGCGGTGCGCGTGGAGCCTCATCTTCACTCGATGGAAGAAAAGT 3300
QY 3301 CATGCTCTGGGAGCGGAGACAGCTGCTTGGGGGATATCTTACCGACTTCCCGTGC 3360
Db 3301 CATGCTCTGGGAGCGGAGACAGCTGCTTGGGGGATATCTTACCGACTTCCCGTGC 3360
QY 3361 CGCCGACTTGGCGGAGGTCTCTTGGCCAGCTGATGGCTATACCTCAAAGGGGTG 3420
Db 3361 CGCCGACTTGGCGGAGGTCTCTTGGCCAGCTGATGGCTATACCTCAAAGGGGTG 3420
QY 3421 GAGTCTTCTGCCCCCATCACTGCTTATGCGCCAGACACGCGGCTTTTGGGACCAT 3480
Db 3421 GAGTCTTCTGCCCCCATCACTGCTTATGCGCCAGACACAGTGGCTTTTGGGACCAT 3480
QY 3481 AGTGTGAGCATGACGGGGCGGACAGACAGAACAGGCGGGGAGATTCAAGTCTCTGC 3540
Db 3481 AGTGTGAGCATGACGGGGCGGACAGACAGAACAGGCGGGGAGATTCAAGTCTCTGC 3540
QY 3541 CACGCTCACTCAGTCTCTTCTCGGAAACAAACCATCTCGGGGTCTTATGGAATGCTACCA 3600
Db 3541 CACGCTCACTCAGTCTCTTCTCGGAAACAAACCATCTCGGGGTCTTATGGAATGCTACCA 3600
QY 3601 TGGAGCTGGCAACAGACTCTAGCCGGCTACAGGGGTCCGCTACACAGATGTACTCCAG 3660
Db 3601 TGGAGCTGGCAACAGACTCTAGCCGGCTACAGGGGTCCGCTACACAGATGTACTCCAG 3660
QY 3661 TGCTGAGGGGACTTAGTGGGGTGGCCAGCCCGGGGACCAATCTTTTGGAGCCGTG 3720
Db 3661 TGCTGAGGGGACTTAGTGGGGTGGCCAGCCCGGGGACCAATCTTTTGGAGCCGTG 3720
QY 3721 CACGCTGAGGCTGAGCTTACCTGATCACTGATGATGATGATGATGATGATGATGATGAT 3780
Db 3721 CACGCTGAGGCTGAGCTTACCTGATCACTGATGATGATGATGATGATGATGATGATGAT 3780
QY 3781 AAGAGCGGGGACAAAGCGAGGAGGCTACTCTCCCGGAGACCTCTTTTCCACTTGAAGGG 3840
Db 3781 AAGAGCGGGGACAAAGCGGGAGGCTACTCTCCCGGAGACCTCTTTTCCACTTGAAGGG 3840

QY	3841	GTCTCTGGGGGGCCCGGTCTCTGCCCCAGAGGCCACCGTCTGGGGGTCTTCCGGGCAGC	3900	QY	4921	AGGGGCCCATGGTATGAGCTCACACAGCGGAGACCAACCGTCAAGCTCAGAGCATATTT	4980
DB				DB			
QY	3841	GTCTCTCAGGAGGGCCCGGTGCTATGCCCCCAGGGGCCACGCTGCGGAGTCTTCCGGGCAGC	3900	QY	4981	CAACACACCTGGTTTGGCTGTGTCACAGACCATCTTGAGTTTTCGGAGGACATTTTTCAC	5040
DB				DB			
QY	3901	CGTGTGCTCCCGGGCGGTGGCCAAAGTCATAGATTATTCCTCCGCTTGAGACACTTGACAT	3960	QY	5041	CGGCTCTACACACATAGATGCCACTTCTCTTTCCAAACAAAGCAATCGGGGAAAAATTT	5100
DB				DB			
QY	3901	TGTGTGCTCTCGGGCGGTGGCTTAAGTCCATAGATTTCATCCCGCTTGAGACACTCGACAT	3960	QY	5041	CGGCTCTACACACATAGATGCCACTTCTCTTTCCAAACAAAGCAATCGGGGAAAAATTT	5100
DB				DB			
QY	3961	CGTCACTCGGTCCCCACCTTTAGTGAACAAAGCACACACACCTGCTGTGCCCCCAACTTA	4020	QY	5041	CGGCTCTACACACATAGATGCCACTTCTCTTTCCAAACAAAGCAATCGGGGAAAAATTT	5100
DB				DB			
QY	3961	CGTCAAGCGGTCCCCACCTTTAGTGAACAAAGCACACACACCTGCTGTGCCCCCAACTTA	4020	QY	5101	CGCATCTTAACAGCTTACAGGCTACAGTGTGCGCTAGGGCCAAAGCCCCCCCCCGCTC	5160
DB				DB			
QY	4021	TCAGTGTGGGTACTTACATGCCCCCGACCTGGTGTAGTGGAAAGACACAAAGTCCCTGTGCG	4080	QY	5101	CGCATCTTAACAGCTTACAGGCTACAGTGTGCGCTAGGGCCAAAGCCCCCCCCCGCTC	5160
DB				DB			
QY	4021	TACAGTGTGGGTACTTACATGCCCCCGACCTGGTGTAGTGGAAAGACACAAAGTCCCTGTGCG	4080	QY	5161	CTGGAGCTCATGTGGAAGTGTGACTCGACTCAAGCCACACACTCGTGGGGCCCCACACC	5220
DB				DB			
QY	4081	GTATGCGCTCAGGGGTACAAAGTCTAGTCTTAATCCCTCGGTGGCTGCCACCTGGG	4140	QY	5161	CTGGAGCTCATGTGGAAGTGTGACTCGACTCAAGCCACACACTCGTGGGGCCCCACACC	5220
DB				DB			
QY	4081	ATATGCTGCTCAGGGGTATAAAGTGTAGTGTCTTAATCCCTCAGTGGCTGCCACCTGGG	4140	QY	5221	TCTCCTGTACCGCTTGGGCTCTGTTCACACAGAGTCAACCTCAACGATTCCTGTGACGAA	5280
DB				DB			
QY	4141	GTTTGGGGGTACTTGTCTCAAGGCACATGGCATCAATCCCAACATTAGGACTGGGCTCAG	4200	QY	5221	TCTCCTGTACCGCTTGGGCTCTGTTCACACAGAGTCAACCTCAACGATTCCTGTGACGAA	5280
DB				DB			
QY	4201	GACTGTGAGACCGGGGGGCCCATCACGTACTCCACATATGTCAAATTCCTCGCGGATGG	4260	QY	5281	ATACATGCCACCTGCATGCAAGCCGACCTTTGAGTGTATGACCAAGCATGCGGTCTTGGC	5340
DB				DB			
QY	4261	GGGCTGTGCGGGCGGCTATGATCATCATATGCGATGAATGCCATGCCGTGGACTC	4320	QY	5341	TGGGGGGTCTTGGCGGCTCGCGCGCTACTGCTGGCGACCGGGTGTGTTTGCATCAT	5400
DB				DB			
QY	4321	TACCAACCATCTTCCGATCGGAACAGTCTCTGATCAAGCAGAGACAGCGGGGTCAAGCT	4380	QY	5341	TGGGGGGTCTTGGCGGCTCGCGCGCTACTGCTGGCGACCGGGTGTGTTTGCATCAT	5400
DB				DB			
QY	4381	AACTGTGCTGGCTACAGCTACGCCCTTGGGTGAGTGAACCTTATGGGAGGCGATTCCCTGTG	4440	QY	5401	CGGCGCTTGCACATTAACACGAGCGCTGCTTGGCGCGGACCAAGAGGTCTCTATGA	5460
DB				DB			
QY	4441	CGAGTGGCCCTCGGGCAGGAGGTGAGATCCCTTCTATGGGAGGCGATTCCCTGTG	4500	QY	5461	GGCTTTTCATGAGATGGAGGAATGCGCTCTAGAGCGCTCTCATTTGAAGAGGGCGAGCG	5520
DB				DB			
QY	4501	ATACATCAAGGAGGAGAACACTTGATCTTTGCGCACTCAAAAGAAAAAGTGTGACGACT	4560	QY	5461	GGCTTTTCATGAGATGGAGGAATGCGCTCTAGAGCGCTCTCATTTGAAGAGGGCGAGCG	5520
DB				DB			
QY	4561	CGCGGGCCCTTCGGGGTATGGGCTTGAACCTCAGTGGGATACTACAGAGGTTGGAGCT	4620	QY	5521	GATAGCCGAGATGCTGAAGTCAAGATCCAAAGCTTATTTGACGCAAGCTTCCAAACAAAGC	5580
DB				DB			
QY	4621	CTCCGTAATACCACTCAGGAGAGAGTGTGCTGCGCCACCGCGCCCTCATGACGGG	4680	QY	5521	GATAGCCGAGATGCTGAAGTCAAGATCCAAAGCTTATTTGACGCAAGCTTCCAAACAAAGC	5580
DB				DB			
QY	4681	GTATGAGAGACTTTGATCTCGGTGATCGAAGCTGCAAGCTGCGGTCACTCAAGTTGTAGA	4740	QY	5581	TCAGACATACAAACCCACTGTGCGGGCTTCATGGCCCAAGGTAGAACAAATTTCTGGGCCAA	5640
DB				DB			
QY	4741	CTTCAAGTTGAGACCTTACCAATTAACACACAGACTGTCCCTCAAGAGCGTGTCTC	4800	QY	5641	ACACATGTGGAATTTTCATCAGCGGCTTCAATACCTCGCAGGACTATCAACACTGCCAGG	5700
DB				DB			
QY	4801	ACGTAGCCAGCGCCGGGGCCGACCGGGCAGGGGAAAGACTGGGTATTTATAGGTATGTTTC	4860	QY	5641	ACACATGTGGAATTTTCATCAGCGGCTTCAATACCTCGCAGGACTATCAACACTGCCAGG	5700
DB				DB			
QY	4861	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	4920	QY	5701	GAACTCTCTGTAGTTCATGATGGCAATCAGTGGCGCCCTTCACACTTCGTTGTCAAC	5760
DB				DB			
QY	4861	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	4920	QY	5701	GAACTCTCTGTAGTTCATGATGGCAATCAGTGGCGCCCTTCACACTTCGTTGTCAAC	5760
DB				DB			
QY	4920	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	4980	QY	5761	TAGCACACTACTCTTCTCAACATTTTGGGGGCTGGCTAGCATCCCAAAATTCGCGCTCC	5820
DB				DB			
QY	4980	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5040	QY	5821	CGCGGGGCTTACCGGCTTCTGCTCAGTGGCTTGGTGGGGGCTGGCTAGGCAGCATAGG	5880
DB				DB			
QY	5040	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5100	QY	5821	CGCGGGGCTTACCGGCTTCTGCTCAGTGGCTTGGTGGGGGCTGGCTAGGCAGCATAGG	5880
DB				DB			
QY	5100	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5160	QY	5881	CTTAGGTAAAGTGTAGTGGACATCTCTGGCAGGGTATGGTGGGGGCTCT	5940
DB				DB			
QY	5160	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5220	QY	5941	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6000
DB				DB			
QY	5220	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5280	QY	6000	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6060
DB				DB			
QY	5280	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5340	QY	6060	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6120
DB				DB			
QY	5340	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5400	QY	6120	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6180
DB				DB			
QY	5400	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5460	QY	6180	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6240
DB				DB			
QY	5460	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5520	QY	6240	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6300
DB				DB			
QY	5520	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5580	QY	6300	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6360
DB				DB			
QY	5580	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5640	QY	6360	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6420
DB				DB			
QY	5640	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5700	QY	6420	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6480
DB				DB			
QY	5700	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5760	QY	6480	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6540
DB				DB			
QY	5760	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5820	QY	6540	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6600
DB				DB			
QY	5820	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5880	QY	6600	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6660
DB				DB			
QY	5880	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5940	QY	6660	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6720
DB				DB			
QY	5940	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	5980	QY	6720	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6780
DB				DB			
QY	5980	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6040	QY	6780	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6840
DB				DB			
QY	6040	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6080	QY	6840	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6900
DB				DB			
QY	6080	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6120	QY	6900	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	6960
DB				DB			
QY	6120	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6160	QY	6960	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7020
DB				DB			
QY	6160	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6200	QY	7020	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7080
DB				DB			
QY	6200	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6240	QY	7080	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7140
DB				DB			
QY	6240	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6280	QY	7140	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7200
DB				DB			
QY	6280	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6320	QY	7200	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7260
DB				DB			
QY	6320	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6360	QY	7260	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7320
DB				DB			
QY	6360	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6400	QY	7320	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7380
DB				DB			
QY	6400	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6440	QY	7380	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7440
DB				DB			
QY	6440	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6480	QY	7440	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7500
DB				DB			
QY	6480	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6520	QY	7500	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7560
DB				DB			
QY	6520	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6560	QY	7560	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7620
DB				DB			
QY	6560	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6600	QY	7620	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7680
DB				DB			
QY	6600	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6640	QY	7680	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7740
DB				DB			
QY	6640	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6680	QY	7740	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7800
DB				DB			
QY	6680	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6720	QY	7800	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7860
DB				DB			
QY	6720	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6760	QY	7860	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7920
DB				DB			
QY	6760	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6800	QY	7920	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	7980
DB				DB			
QY	6800	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6840	QY	7980	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	8040
DB				DB			
QY	6840	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6880	QY	8040	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	8100
DB				DB			
QY	6880	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6920	QY	8100	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	8160
DB				DB			
QY	6920	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	6960	QY	8160	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	8220
DB				DB			
QY	6960	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	7000	QY	8220	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	8280
DB				DB			
QY	7000	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	7040	QY	8280	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	8340
DB				DB			
QY	7040	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	7080	QY	8340	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	8400
DB				DB			
QY	7080	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	7120	QY	8400	CGTGCATTTCAAGATCATGTCTGGCGAAGGCCCTTCATTTGAGGATGTCTGCTCAACTGGT	8460
DB				DB			
QY	7120	CACTGGTGAAGAGCTCAGGATGTTTGAACAGTGTAGTGTCTCGGAGTGTACGATGC	7160	QY			

6001	Db	GCCTGGAATCTGTCTCCGGGTGCTTGGTAGTGGGAGTCATCTGCGCGGCCATTCTGGG	6060
6061	Qy	CCGACAGTGGGACCGGGGAAGGGCTGTCCAATGATGAATAGAGTCAATTGCGCTTTGCG	6120
6061	Db	CCGACAGTGGGACCGGGGAAGGGCGCTCCAAATGAATAGAGTCAATTGCGCTTTGCG	6120
6121	Qy	TTCCAGAGGAAACACGTCGCCCCCACCCTACTACGTGACGAGTTCGGATCGCTCGCAGCG	6180
6121	Db	TTCCAGAGGAATCACGTGCGCCCCCACCCTACTACGTGACGAGTTCGGATCGCTCGCAGCG	6180
6181	Qy	TGTGACCCAACTACTTGGCTCCCTTACCAATAACAGCTCTCTCAGGAGTCCCAAACTG	6240
6181	Db	TGTGACCCAACTACTTGGCTCCCTTACCAATAACAGCTCTCTCAGGAGTCCCAAACTG	6240
6241	Qy	GATTACTGAAGACTGCCCACTCCCATCGAGGGCTCGTGCTCCGGATGTGGGATG	6300
6241	Db	GATTACTGAAGACTGCCCACTCCCATCGAGGGCTCGTGCTCCGGATGTGGGATG	6300
6301	Qy	GGTTTGACCACTCTAACAGACTTTAAAACTGGCTGACCTCCAAATTGTTCCCAAGAT	6360
6301	Db	GGTTTGACCACTCTAACAGACTTTAAAACTGGCTGACCTCCAAATTGTTCCCAAGAT	6360
6361	Qy	GCTTGTCTCCCTTTATCTTGTCTAAAAAGGGGTACAAGGGCGTGTGGCTGGCACTGG	6420
6361	Db	GCCCGGCTCCCTTTGTCTCTGTCAAAAGGGGTACAAGGGCGTGTGGCGCGCACTGG	6420
6421	Qy	TATCATGACACACAGGCTGCTTTGCGCGGCCAATATCTCTGCAANTGTCCGCTGGGCTC	6480
6421	Db	CATCATGACACACAGGCTGCTTTGCGCGGCCAATATCTCTGCAANTGTCCGCTGGGCTC	6480
6481	Qy	CATCAGAAATACGGGGGCCAAAACCTGCATGAATATCTGGCAGGGGACCTTCCCATCAA	6540
6481	Db	CATCAGAAATACGGGGGCCAAGAACTGCATGAATATCTGGCAGGGGACCTTCTTATCAA	6540
6541	Qy	TTGTTTACACGGAGGCCAGTGCCTGCGGAAACCGGCACCAAACTTTAAGATGCCCACTG	6600
6541	Db	TTGTTTACACGGAGGCCAGTGCCTGCGGAAACCGGCACCAAACTTTAAGATGCCCACTG	6600
6601	Qy	GAGGGTGGCGGCTTCAGAGTACGGGAGGTGACGACACAGGCTATACCACTACATAAC	6660
6601	Db	GAGGGTGGCGGCTTCAGAGTACGGGAGGTGACGACACAGGCTATACCACTACATAAC	6660
6661	Qy	AGGACTTACCACTGATAACTTGAAGTTCCTTGCCAACTACCTTCTCCAGATTCTTTTC	6720
6661	Db	AGGACTTACCACTGATAACTTGAAGTTCCTTGCCAACTACCTTCTCCAGATTCTTTTC	6720
6721	Qy	CTGGGTGGACGAGGTGCAGATCCATAGTGTGCCCCCATACCGAAGCCGTTTTTCGGGA	6780
6721	Db	CTGGGTGGACGAGGTGCAGATCCATAGTGTGCCCCCATACCGAAGCCGTTTTTCGGGA	6780
6781	Qy	TGAGGTCTCGTCTCGGTGGGCTTAATCATTTGTGTCGGTCTCAGCTCCCTTGCGA	6840
6781	Db	TGAGGTCTCGTCTCGGTGGGCTTAATCATTTGTGTCGGTCTCAGCTCCCTTGCGA	6840
6841	Qy	TCCTGAACTGACACAGACGPTATGAGTCCATCTAACAGACCATCCCATATCACGC	6900
6841	Db	CCCTGAACTGACACAGACGPTATGAGTCCATCTAACAGATCCATCTCATATCACGC	6900
6901	Qy	GGAGACTGACGCGGGGCTTTGGCACGGGGTCAACCCCGTCCGAGGCAAGCTCTCAGC	6960
6901	Db	GGAGACTGACGCGGGGCTTTAGCGGGGGTCAACCCCGTCCGAGGCAAGCTCTCAGC	6960
6961	Qy	GAGCCAGTATCGGCACCATCGCTCGAGGCCACCTGCAACCCACCGGCAAGGCTATGA	7020
6961	Db	GAGCCAGTATCGGCACCATCGCTCGAGGCCACCTGCAACCCACCGGCAAGGCTATGA	7020
7021	Qy	TGTGGACATGTTGATGCCAACTGTTTCATGCGGGGGGATGTGACCCGATAGATCTGA	7080
7021	Db	TGTGGACATGTTGATGCCAACTGTTTCATGCGGGGGGATGTGACCCGATAGATCTGA	7080
7081	Qy	GTCCAAAGTGGTCTCTGGAAGTCTCTCGACCCCAATGGTCCAGAAAGGAGCGCACTTGA	7140

QY	8221	GGTATGCGGGCTTCTTATGGAATCCAGTACTCCCGGCTCAGCGGTGAGATTTCTCTT	8280
Db	8221	GGTATGCGGGCTTCTTATGGAATCCAGTACTCCCGGCTCAGCGGTGAGATTTCTCTT	8280
QY	8281	GNAGCATGGCGGGAAGAAAGAACCCCTATGGGTTTTCGTATGATACCCGATGCTTGA	8340
Db	8281	GNAGCATGGCGGGAAGAAAGAACCCCTATGGGTTTTCGTATGATACCCGATGCTTGA	8340
QY	8341	CTCAACCGTCACTGAGAGAGACATCAGGACTGAGGAGTCCATATATCGGGCTTGTTCCTT	8400
Db	8341	CTCAACCGTCACTGAGAGAGACATCAGGACTGAGGAGTCCATATATCGGGCTTGTTCCTT	8400
QY	8401	GCCGAGAGGCCCACATGCGCATACATCTGACTGAGAGACTTTAGTGGGAGGCC	8460
Db	8401	GCCGAGAGGCCCACATGCGCATACATCTGACTGAGAGACTTTAGTGGGAGGCC	8460
QY	8461	CATGTTCAACAGCAAGGGCCAGACCTGCGGTACAGGCGTTGCGGCGCCAGCGGGTGT	8520
Db	8461	TAATGTTCAACAGCAAGGGCCAAACCTGCGGTACAGGCGTTGCGGCGCCAGCGGGTGT	8520
QY	8521	TACCACTAGCATGGGAAACACCATCAATGCTATGTGAAGCTTTAGCGGCTGTAAAGC	8580
Db	8521	CACCACTAGCATGGGAAACACCATCAATGCTAGTGAAGCTTTAGCGGCTGTAAAGC	8580
QY	8581	TGCAGGATTAATGCGGCCACAAATGCTGTATGCGCGATGACTTGGTTGTCATCTCAGA	8640
Db	8581	TGCAGGATTAATGCGGCCACAAATGCTGTATGCGCGATGACTTGGTTGTCATCTCAGA	8640
QY	8641	GAGCAGGGGACCGAGGAGGAGCGAGCGGAACCTGAGAGCTTCAAGGAGCTATGACCA	8700
Db	8641	AAGCCAGGGAGCGAGGAGGAGCGAGCGGAACCTGAGAGCTTCAAGGAGCTATGACCA	8700
QY	8701	GTAATTCGCCCTCCTGCTGACCCGCCAGACGGGAATGACCTGAGCTGATACATC	8760
Db	8701	GTAATTCGCCCTCCTGCTGACCCGCCAGACGGGATGATGATCTGAGCTGATACATC	8760
QY	8761	TTGCTCCTCAATGCTGCTGGCGTTGGGCCCAAGAGCGCGGAGATCTACCTGAC	8820
Db	8761	TTGCTCCTCAATGCTGCTGGCGTTGGGCCCAAGAGCGCGGAGATCTACCTGAC	8820
QY	8821	CAGAGACCTAGCACTCCAAATCGCCGGCTGCTGGGAAACAGTTAGACACTCCCGCTGT	8880
Db	8821	CAGAGACCTAGCACTCCAAATCGCCGGCTGCTGGGAAACAGTTAGACACTCCCGCTGT	8880
QY	8881	CAATTCATGGCTAGGAAACATCATCCAGTACGCGCCCGACCATATGGGCTCGCATGCTCT	8940
Db	8881	CAATTCATGGCTAGGAAACATCATCCAGTACGCGCCCGACCATATGGGCTCGCATGCTCT	8940
QY	8941	GATGACACACTTCTTCTCATTCTCATGGCCCAAGATCTTGGACCGAATCTCACTT	9000
Db	8941	GATGACACACTTCTTCTCATTCTCATGGCTCAAGACACGCTGGACCGAATCTCACTT	9000
QY	9001	TGAGATGTACGAGCGGTGACTCCGTTGAGTCCCTTGGACCTCCAGCCATAATTGAAAG	9060
Db	9001	TGAGATGTACGAGCGGTGACTCCGTTGAGTCCCTTGGACCTCCAGCTATATTGAAAG	9060
QY	9061	GTTACACGCGCTTGAACGCTTTTCTCTGACACATACATCTCCCGACCACTGACACGGGT	9120
Db	9061	GTTACACGCGCTTGAACGCTTTTCTCTGACACATACATCTCCCGACCACTGACACGGGT	9120
QY	9121	GGCTTCAGCCCTCAGAAACTTGGGGCGCCACCCCTCAGAGCGTGAAGAGCGGGCACG	9180
Db	9121	GGCTTCAGCCCTCAGAAACTTGGGGCGCCACCCCTCAGAGCGTGAAGAGCGGGCACG	9180
QY	9181	TGCAGTCAAGGGCTCCCTCATCTCCGTTGGGGGAGAGCGGCTTTGCGGCCGATATCT	9240
Db	9181	TGCAGTCAAGGGCTCCCTCATCTCCGTTGGGGGAGAGCGGCTTTGCGGCCGATATCT	9240
QY	9241	CTTCAACTGGGGGTGAAGACCAAGCTCAAACTCACTCCATTGCGGGAAGCGGCTCCT	9300
Db	9241	CTTCAATGGGGGTGAAGACCAAGCTCAAACTCACTCCATTGCGGGAAGCGGCTCCT	9300

QY	9301	GGATTTATCCAGCTGTTCACTGTCGCGCGCGGCGGCGACATTTATCACAGCGTGC	9360
Db	9301	GGATTTATCCAGCTGTTCACTGTCGCGCGCGGCGGCGGACATTTATCACAGCGTGC	9360
QY	9361	GGTGCCCGACCCCGCTTATTACTCTTTGGCCTACTCTCTACTTTTTGTAGGGTAGGCT	9420
Db	9361	GGTGCCCGACCCCGCTTATTACTCTTTGGCCTACTCTCTACTTTTTGTAGGGTAGGCT	9420
QY	9421	TTTCTACTCTCCCGCTCGGTAGAGCGGCACACATTAGTACTACATCCATAGCTAACTGCC	9480
Db	9421	TTTCTACTCTCCCGCTCGGTAGAGCGGCACACATTAGTACTACATCCATAGCTAACTGCC	9480
QY	9481	CTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	9540
Db	9481	CTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	9540
QY	9541	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	9588
Db	9541	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	9588

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